



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,170	03/04/2002	Edward T. Maas	HELLWAT-7	9952
20455	7590	12/15/2004	EXAMINER	
LATHROP & CLARK LLP 740 REGENT STREET SUITE 400 P.O. BOX 1507 MADISON, WI 537011507			PHAM, MINH CHAU THI	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/091,170

Applicant(s)

MAAS ET AL.

Examiner

Minh-Chau T. Pham

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-37 and 39-97 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 74-97 is/are allowed.
- 6) ☒ Claim(s) 1, 3-11, 13-27, 29-37, 39-45, 48-60 and 64-73 is/are rejected.
- 7) ☒ Claim(s) 2, 28, 46, 47 and 61-63 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Objections***

Claims 38 and 73 are objected to because of the following informalities: There is NO claim 38. Claim 73 should depend on any previous claim, NOT on itself. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3-11, 13-27, 29-37, 39-45, 48-60 and 64-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hellenbrand et al (5,096,596; Abstract; 22, 24, 26, 36, 63, 64, 65, 72 & 78 in Fig. 1; col. 2, line 45 through col. 3, line 9 and line 56 through col. 4, line 37).

Hellenbrand et al disclose an aeration control apparatus for water filtration system for removing contaminants from well comprising an aeration tank (24) having a water inlet (22), a water outlet (40), a diffuser (26), a pick-up tube (36), a bleed-off tube (74), a drain tube (70), a source of compressed gas (86), a first valve (78) connecting the source of compressed gas, the second valve (72) for opening the flow passage between the source of compressed gas and the aeration tank, a third valve (64) operated by the opening of the second valve to connect the interior of the aeration tank, a timer (col. 3, line 65 through col. 4, line 2) is a controller controlling the flow of water and air through the system by automatically adjusting the positions of valves (72, 78 and 64), a bias member (65) positioned between the valve piston and valve stem to bias the valve stem into engagement with the valve piston. It would have been obvious to a

person having ordinary skill in the art at the time the invention was made to provide a controller for the aeration tank as taught by Hellenbrand et al to provide an improved apparatus for removing contaminants and undesirable odors found in well water.

***Allowable Subject Matter***

Claims 2, 28, 46, 47 and 61-63 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: None of the prior arts discloses a third valve operatively connected to at least the first valve displaceable between fifth position that disconnects the bleed off tube and the drain and a sixth position that connects the bleed off tube and the drain.

Claims 74-97 allowed.

The following is an examiner's statement of reasons for allowance: None of the prior arts discloses a third valve operatively connected to at least the first valve displaceable between fifth position that disconnects the bleed off tube and the drain and a sixth position that connects the bleed off tube and the drain.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Amendment***

Applicant's arguments filed on August 24, 2004 have been fully considered but they are not persuasive.

Applicant argues that in Hellenbrand "the operation of the filter valve 64 neither affects nor controls operation of the drain valve 72 or the air recharge valve 78, nor is the operation of the filter valve 64 affected or controlled by operation of either the drain valve 72 or the air recharge valve 78". The Examiner respectfully disagrees. Hellenbrand clearly discloses a "filter controller 63 closed the inlet 44 to the filter tank 46 which prevents water from the aeration tank 24 from entering the filter tank 46 and a drain valve 72 is opened connecting the bleed-off tube 74, which has an inlet 76 within the aeration tank (24) with the drain tube 70. At the same time, an air recharge valve 78 is opened in the air tube 80 which is connected to the air inlet 82 of the aeration tank 24" (see col. 4, lines 23-30) , and "as shown in Fig. 6, the controller 63 closes the drain and recharge valves 72, 78 and opens the filter valve 64" (see col. 5, lines 1-3). It is clear that these 3 valves (filter valve 64, recharge valve 78 and drain valve 72) are controlled by the controller 63. Applicant further argues that "there is no valve in Hellenbrand that is downstream of the recharge valve 78". The Examiner respectfully disagrees. Hellenbrand does disclose a check valve 84 downstream of recharge valve 78 to prevent water from entering the air pump 86 (see col. 4, lines 28-32).

Claims 74-97 allowed as indicated above with the reasons for allowance.

Claims 2, 28, 46, 47 and 61-63 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all

Art Unit: 1724


of the limitations of the base claim and any intervening claims, and the reason for indicating allowable subject matter is indicated above.

Applicant's arguments with respect to claims 1, 3-11, 13-27, 29-37, 39-45, 48-60 and 64-73 have been thoroughly considered but are moot in view of the rejection as discussed above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**Minh-Chau Pham**  
**Patent Examiner**  
**Art Unit: 1724**